# San Francisco Integrated DER Planning Project

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#### **Project Overview**

Demonstrate in San Francisco an integrated planning process for local governments and utilities to work together to illuminate where and how DERs can be deployed to support multiple goals:

- City planning goals, such as climate action, resilience, land-use and equity
- Net grid benefits
- Consumer choices



KEY IDEA: Use shared City and IOU data to plan for and encourage mutually beneficial DER siting and performance



### Project Applicants & Key Participants

#### **PROJECT APPLICANTS:**

- Center for Sustainable Energy
   Technical and policy support, state-level engagement,
   produce and share case study

#### **KEY PARTICIPANTS:**

- Pacific Gas & Electric
- City departments and local stakeholders
- Distribution Resources Plan pilots working group



#### **Project Goals**

- Establish and streamline data sharing between City and PG&E (recognizing privacy, security, other concerns)
- Identify how targeted DER deployment (performance characteristics and/or location) can meet local planning priorities, mitigate grid constraints and provide grid value
- Explore how the City can both support and guide consumer choices through targeted DER programs and policies
- Show how IOU and state load and DER forecasts can be improved by incorporating local government plans
- Enable replication of this project in California and beyond



#### **Project Impacts**

- Demonstrate Societal Benefits Methodology. Demonstrate an innovative method for incorporating societal locational benefits into identification of optimal locations (Guidance Ruling requirement)
- Guide DER deployment. Empower local governments to leverage DRP data and tools to understand grid conditions and support targeted DER deployment
- Forecast DER contributions to energy & climate goals. Show how to improve load and DER forecasts, enabling better accounting for how DERs will contribute to the achievement of state and local climate and energy goals



### Project Tasks & Timeline

- 1. Project Kickoff & Administration (M1-M24)
- 2. State-level Engagement (M1-M10) Engage with DRP stakeholders on the design and potential replication of the project
- **3. Data Sharing** (M4-M10) Work with PG&E to identify and share useful city and grid data. Document process and opportunities to improve available data and streamline data sharing
- **4.** Local Planning and Forecasting (M6-M10) Establish local DER targets and societally-preferred locations



## Project Tasks & Timeline (continued)

- **5. Integrated Planning** (M11-M15) Work with PG&E to analyze DER deployment options, identify where DER deployment will support multiple goals
- **6. State-level Planning** (M11-M18) Work with CPUC, CEC and DRP stakeholders to incorporate local-level data into state-level planning processes
- 7. Local Programs and Policies (M16-M18) Explore opportunities to incorporate project findings into the City's DER programs and policies
- **8. Dissemination** (M13-M24) Produce and share a case study of this project



# **Key Milestones**

Task	Milestone description	Verification Process
1	Hold kickoff meeting of project partners, stakeholders and PG&E	Summary of meeting participants and outcomes included in Q1 report
2	Document input received on leveraging the project in CPUC DRP proceeding	Summary of input and engagement strategy included in Q4 report
3	Document data types needed by City and PG&E, and sources of data	Summary of data assessment included in Q2 report
3	Share data between City and PG&E, identify gaps and opportunities	Summary of data shared, and recommendations included in Q3 report
4	Document local DER targets and process used to develop them	Include summary of local DER forecasting in Q4 report



## Key Milestones (continued)

Task	Milestone description	Verification Process
5	Document opportunities for DER deployment to mitigate grid impact and provide grid value	Findings included in Q5 report
5	Document opportunities for DER deployment to mitigate grid impact and provide grid value	Findings included in Q5 report
6	Recommend how to incorporate local data into state-level planning	Recommendations included in Q6 report
7	Document policy recommendations for City to encourage targeted DER deployment	Summary of recommendations included in Q6 report
8	Publish San Francisco case study	Provide report and post on San Francisco Environment website



#### **Project Costs & Funding**

- Total costs (CSE and SFE): \$389,551
- Funding: Requested \$350,551 through U.S. Department of Energy Cities Leading through Energy Analysis and Planning (LEAP). Requested June 23, ETA notification July 30
- Additional funding needs:
  - TBD any amount not awarded through DOE LEAP
  - PG&E participation costs (data sharing, integrated planning)
  - CSE engagement with DRP stakeholders and state-level process recommendations (\$39,000)
  - DRP stakeholder costs (intervenor compensation)



#### Thank You

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We work nationally in the clean energy industry and are always open to exploring partnership opportunities.

